

Sleep Deprivation during Pregnancy: The Cost of Ignorance!

Kamalesh K Gulia* and Velayudhan Mohan Kumar

Division of Sleep Research, Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences and Technology, India

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*Corresponding author

Kamalesh K Gulia, Division of Sleep Research, Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala 695012, India, Tel: + 4712520298, 91-9048344712; Fax: + 91 4712341814; Email: kkguliak@hotmail.com

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Sleep deprivation is emerging as a major health concern due to the changing life style in the current 24X7 society. Each one of us has experienced insomnia, acute or chronic, at some point of our lives. With the great initiatives taken by health experts in the last couple of years, sleep disorders have been classified as per ICSD-3 and DSM-V criterion, though treatment strategies are still evolving. Nevertheless, sleep problems during pregnancy still remain a topic that needs greater attention. A fairly long gestation period in a woman is marked by three distinct trimesters, each having its own developmental timelines and distinct variations in physical, physiological, and psychological aspects. Probably, a decade back, majority of women were home makers in many civilizations and would have been getting sufficient rest during pregnancy. In the modern style of life, if the pregnant women complain of insomnia, and if it is chronic in nature, it should be taken as a matter requiring serious attention. However, insomnia during pregnancy remains largely under-diagnosed and ignored. In the last decade, some epidemiological, meta-analysis and polysomnographic recordings based on evidences have shown tangible association between insomnia during pregnancy and gestational diabetes, pre-eclampsia, intrauterine growth restriction, preterm delivery, anxiety disorders and pre and postpartum depression [1-5].

Research data on young population have indicated that chronic insomnia is a potential risk factor for various diseases including hypertension, obesity, cardiovascular diseases, neurodegenerative diseases, cancer, cognitive deficits, anxiety disorders, which are a serious dent on any national exchequers. Insomnia during pregnancy will have even more serious consequences as it involves not only the health of the pregnant mother but also that of the growing fetus. A few recent reports on the animal model of pregnancy have provided robust evidences that sleep deprivation during pregnancy impaired the cognitive development of the offspring [6-8]. REM sleep deprivation of the mother during pregnancy gives rise to depression like symptoms in the offspring, whereas total sleep deprivation elicited hyperactivity and increased risk taking behavior in the offspring during its adolescence. Hyperactivity is one of the key symptoms in Attention Deficit Hyperactivity Disorder (ADHD) which has a high prevalence in children (about 6-9%). These studies on sleep disruptions during pregnancy are definitely throwing light on the importance of sleep as a probable factor in the an etiology of ADHD and several other conditions like autism.

So, sleep disruptions during pregnancy and post-partum lactation period form an emerging health concern. As fetal neural networks are highly vulnerable to maternal sleep loss, the offspring is predisposed to various anxiety disorders and learning disabilities. Hence, sleep during pregnancy and postpartum requires due attention. There is a dire need for Research Funding agencies around the world to give thrust for research in this area. As per World Health Organization, about 10% of pregnant women and 13% of women who have just given birth, experience mental disorders. In developing countries, the figures are 15.6% and 19.8% respectively. Apart from malnutrition, insomnia may be responsible for higher incidence of mental disorders in these regions. Since a large number of children and adolescents (10-20%) experience mental disorders, they deserve greater attention as neuropsychiatric conditions are the leading cause of disability. However, the role of maternal sleep deprivation in producing mental disorders in the offspring is largely ignored. Neuropsychiatric conditions severely influence children's development, educational attainments and their potential to live fulfilling and productive lives. The time has come to emphasize on the need for proper sleep during pregnancy in the maternal health care programmes of various countries.

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